CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/CEMENT/2014-15 Date: 06.02.2015

TEST REPORT ON CEMENT

CLIENT	:	**Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.
REFERENCE	:	BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015
SAMPLE ID	:	Cement
SAMPLE RECEIVED ON	:	04.02.2015
PERIOD OF TESTING	:	04.02.2015 to 06.02.2015

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988(RA-2009)	30.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988(RA-2009)	140 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988(RA-2009)	470 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988(RA-2009)	1 mm	Not more than 10mm

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE
W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/SAND-Gradation/2014-15 : 06.02.2015

TEST REPORT ON DETERMINATION GRADATION OF FINE AGGREGATES

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Technical Reference : IS : 2386 Part 1 - 1963 RA-2007

Sample ID : Fine Aggregates

Sample Received on : 04.02.2015

Date of Testing : 06.02.2015

Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	100	100	100	100
4.75	93.50	90-100	90-100	90-100	95-100
2.36	74.30	60-95	75-100	85-100	95-100
1.18	53.10	30-70	55-90	75-100	90-100
600 Micron	21.60	15-34	35-59	60-79	80-100
300 Micron	8.60	5-20	8-30	12-40	15-50
150 Micron	4.60	0-10	0-10	0-10	0-15

Remarks : This sample is under Zone-I specific limits.

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE
W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahan... Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/AGG/GR/2014-15 : 06.02.2015

TEST REPORT ON DETERMINATION GRADATION OF COARSE AGGREGATES

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Technical Reference : IS : 2386 Part 1 -1963 RA-2007

Sample ID : Coarse Aggregates (40mm)

Sample Received on : 04.02.2015

Date of Testing : 06.02.2015

Total Wt. of Aggregates in gms= **10000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)	
		Graded	Single Sized
80	100	100	-
63	100	-	100
40	96.45	95-100	85-100
20	44.05	30-70	0-20
10	18.40	10-35	0-5
4.75	4.90	0-5	-

Remarks : This sample is under Graded specific limits.

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE
W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/AGG/GR/2014-15 : 06.02.2015

TEST REPORT ON DETERMINATION GRADATION OF COARSE AGGREGATES

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Technical Reference : IS : 2386 Part 1 -1963 RA-2007

Sample ID : Coarse Aggregates (20mm)

Sample Received on : 04.02.2015

Date of Testing : 06.02.2015

Total Wt. of Aggregates in gms= **5000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS :383-1970 (RA- 2007)	
		Graded	Single Sized
40	100	100	100
20	96.90	95-100	85-100
10	32.90	25-55	0-20
4.75	6.40	0-10	0-5

Remarks : This sample is under Graded specific limits

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laborator
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE
W12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL /STEEL/2014-15 09.02.2015

TEST REPORT ON REINFORCEMENT STEEL

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the Work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Date of Test : 09.02.2015

Technical Reference : IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	10	0.62	513	556	13.10	O.K	O.K

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE
W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.12/KRIDL /STEEL/2014-15 09.02.2015

TEST REPORT ON REINFORCEMENT STEEL

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the Work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Date of Test : 09.02.2015

Technical Reference : IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	12	0.89	515	558	13.25	O.K	O.K

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE W.12 9.2.15
Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/Fencing/2014-15 12.02.2015

TEST REPORT ON CHAIN LINK FENCING WIRE (8th Gauge)

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Samples ID : Samples Supplied By Agency

CIVIL ENGINEERING TESTING LABORATORY www.civiltechconsultants.com

Sl.No	Description	Result
1	Diameter	4.02 mm
2	Internal Spacing	50 mm X 50 mm
3	Weight / Meter (1m x 1m)	4.180 Kg

Civil-Tech Consultants & Engineers Bangalore

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/MS Angle/2014-15

12.02.2015

TEST REPORT ON STRUCTURAL STEEL

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Samples ID : Samples Supplied By Agency

Specimen Size : ISA-65X65X6mm (1m Length)

Sl.No	Description	Result
1	Thickness	6.04 mm
2	Width	65.0 mm
3	Weight / Meter	5.83 Kg

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.12/KRIDL/MS Pipe/2014-15

12.02.2015

TEST REPORT ON M.S PIPE (38mm Dia)

Client	: **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of work	: Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.
Reference	: BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015
Specimen Size	: M.S Pipe 38mm Dia

PHYSICAL TEST

Sl.No	Description	Result
1	Thickness	2.02 mm
2	Inner Diameter	38.06 mm
3	Outer Diameter	42.10 mm
4	Weight / Meter	1.890 kg

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara
Basaveshwaranagar,
Bangalore - 560 079

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/Kerb Stone/2014-15

05.03.2015

TEST REPORT ON CONCRETE CORE (KERB STONE)

Name of Client	:	**Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.
Name of Agency	:	**Technical Manager,** KRIDL, Bangalore.
Name of work	:	Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.
Reference	:	BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015
Techinical Reference	:	IS:516-1959 (Reaffirmed 2008), SP-24:1983.
Sample received on	:	02.03.2015
Date of Testing	:	05.03.2015
Grade of Concrete	:	M_{15}

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	77.00	0.379	2506.79	1.54	0.955	25.00	12.73	13.75	13.13	16.42
2	50.00	78.00	0.385	2513.83	1.56	0.960	25.50	12.99	14.03	13.46	16.83
3	50.00	80.00	0.395	2514.65	1.60	0.965	26.00	13.24	14.30	13.80	17.25

Civil-Tech Consultants & Engineers Bangalore

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AE W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.12/KRIDL/Paver Blocks/2014-15

09.03.2015

TEST REPORT

Customer	:	**Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager,** KRIDL, Bangalore.
Name of the work	:	Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.
Reference	:	BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015
Type of the test	:	Physical tests on Paver Blocks
Samples supplied by	:	Agency

The results of the tests conducted on the Paver Blocks sample are as follows:

1. THICKNESS:

Sl. No	Identification	Thickness, mm	Average thickness, mm
1	01	60.25	60.27
2	02	60.30	

2. COMPRESSIVE STRENGTH:

Sl. No	Identification	Load in Kilo-Newton	Cross sectional area, mm^2	Compressive strength N/mm^2
1	01	686.5	24,200	28.36
2	02	687.3	24,200	28.40

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

AE W:12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/CUBE/2014-15 12.03.2015

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sample Received on : 12.02.2015

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	12.02.2015	12.03.2015	8.156	475.2	21.12
2	12.02.2015	12.03.2015	8.236	480.3	21.35
3	12.02.2015	12.03.2015	8.310	495.2	22.01

* Information is furnished by the Customer/Representative

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE
W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/CUBE/2014-15 16.03.2015

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sample Received on : 16.02.2015

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	16.02.2015	16.03.2015	8.130	475.6	21.14
2	16.02.2015	16.03.2015	8.276	496.3	22.06
3	16.02.2015	16.03.2015	8.307	510.2	22.68

* Information is furnished by the Customer/Representative

Civil-Tech Consultants & Engineers Bangalore

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AE W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/CUBE/2014-15 18.03.2015

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sample Received on : 18.02.2015

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	18.02.2015	18.03.2015	8.255	480.3	21.35
2	18.02.2015	18.03.2015	8.341	515.3	22.90
3	18.02.2015	18.03.2015	8.470	526.3	23.39

* Information is furnished by the Customer/Representative

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

AE W-12 18/3

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory
An ISO 9001:2008 Certified Company
NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.12/KRIDL/CUBE/2014-15 30.03.2015

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvement and Development works to Geleyara Balaga park Ward No.12, BBMP, Bangalore.

Reference : BBMP/AEE/PSD/DZ/PR/2014-15 Dated: 04.02.2015

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sample Received on : 02.03.2015

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	02.03.2015	30.03.2015	8.375	498.3	22.15
2	02.03.2015	30.03.2015	8.415	531.1	23.60
3	02.03.2015	30.03.2015	8.206	486.5	21.62

* Information is furnished by the Customer/Representative

Civil-Tech Consultants & Engineers Bangalore

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AE W.12

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore-560079